22-75-46-3 Ref 12-71344

# MONTANA STATE DEPARTMENT OF FISH AND GAME FEDERAL AID IN FISH RESTORATION SECTION

HELENA, MONTANA

Job Completion Report
Development Project

State of	Montana	
Project No.	F-24-D-19	Name Southeastern Montana Fishery Study
D. 1.3.0		Title Statewide Lake and Stream
Period Covered	May 1, 1960 to April 30, 1961	Rehabilitation Crater Lake

#### Abstract:

Crater Lake was treated with a mixture of 35 gallons of Chem-Fish Special and 2 gallons of toxaphene on September 7, 1960. The toxicant was applied by boat. Suckers and creek chubs were the principle species killed. When the lake is no longer toxic rainbow trout will be planted.

### Objectives:

Crater Lake is located on public land in Stillwater County. The lake is accessible via a poor jeep road following Fiddler's Creek or by walking from a county road, a distance of approximately one mile. The fish population in the lake consisted of rainbow trout; suckers; and creek chubs, the latter being very abundant. Rainbow trout planted in this lake in the past have shown very poor growth. Fish captured in gill nets in the late summer averaged lighter in weight than when planted in the spring. It is expected that the quality of the trout fishery in this lake will be greatly improved by elimination of the suckers and creek chubs.

### Techniques Used:

The toxicants were pre-emulsified with water and the mixture applied to the lake from a boat. The toxicant-water mixture was run into the proposash of the outboard motor. The amount of toxicant was dispersed into the lake with respect to depth; that is, more toxicant was applied in deep water per unit area than in shallow water per unit area. It was anticipated that the residual toxic properties of toxaphene would kill any sucker or creek chub fry which might hatch later in the fall.

## Findings:

Distressed fish were observed immediately after the toxicants were applied to the lake. No live fish were observed the following morning. Almost all of the dead

fish	obset	ved	from	the	shoreline	and	observed	in	the	littoral	zone	by	boat	were
sucke	rs or	cre	ek c	hubs.	•									

Prepared by	John Peters and Perry Nelson	Approved by Cauge	D. Holten
	February 23, 1961	J	

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